

BEFORE THE
Federal Communications Commission

WASHINGTON, D.C. 20554

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In the Matter of)
)
Amendment to the Commission's) WT Docket No. 95-157
Rules Regarding a Plan for Sharing)
The Costs of Microwave Relocation)

To: The Commission

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COMMENTS
OF
AMERICAN PETROLEUM INSTITUTE

THE AMERICAN PETROLEUM INSTITUTE

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SUMMARY

The American Petroleum Institute ("API") supports the Commission's effort to resolve the "free-rider" problem which occurs when more than one Personal Communications Service ("PCS") licensee benefits from the relocation of a microwave link, but only one PCS licensee pays for that relocation. API endorses the Commission's proposal to allow the creation of "reimbursement rights" once a relocation agreement is reached between the microwave incumbent and the initial PCS licensee. The Commission proposed that a subsequent PCS licensee would be required to reimburse the PCS relocater only if (1) the subsequent PCS licensee's system would have caused co-channel interference to the link that was relocated; and (2) at least one endpoint of the former link was located within the subsequent PCS licensee's authorized market area (MTA or BTA). API believes that the Commission should broaden this process to include any subsequent PCS licensee that would have interfered with the microwave link if the link were still operational.

The Commission proposal also contains a reimbursement limit, or price cap, on the amount which the subsequent PCS licensee would pay the relocater PCS licensee pursuant to the cost-sharing formula. The proposed cap is \$250,000 per

link, plus an additional \$150,000 per link if a tower needs to be constructed. This cap is inadequate, and API submits that \$600,000 would be a more appropriate amount.

The Commission invited comment on whether it should include in its cost-sharing formula only actual costs, or whether it should include premium costs either on a regular basis or with an accelerated depreciation schedule. API urges the Commission to adopt an approach that promotes maximum flexibility for reaching agreements in voluntary negotiations by avoiding a restrictive definition of costs for purposes of reimbursement by subsequent PCS licensees.

The Commission also seeks comment on a narrow definition of "comparable facilities", one that is based on just three factors: (1) communications throughput; (2) system reliability; and (3) operating cost. API believes that a fourth factor, serviceability, should be included in the definition of comparable facilities. API also urges the Commission not to permit "trading off" portions of one factor, such as reliability, for another, such as operating cost.

The Commission's plan would permit PCS licensees to replace analog systems with comparable analog systems; if no

comparable analog replacement equipment is available, the PCS licensee would be required to provide the lowest-cost digital system that satisfies the technical requirements of the Commission's comparable facilities definition. API cautions that replacement analog equipment will generally not be comparable to existing analog equipment because manufacturers are discontinuing support for analog equipment, and hence the future operating cost, serviceability and reliability of analog systems will be inferior to digital systems.

The Commission has requested comment on whether depreciation of equipment should be considered. API opposes this approach because it would not enable microwave incumbents to obtain comparable facilities. Incumbents should not be punished for the Commission's decision to relocate them from the band 1850-1990 MHz. Including depreciation in the replacement equation will penalize microwave incumbents by forcing them to pay a portion of the replacement cost when the existing system provides adequate service and would not be replaced in the absence of this FCC-mandated transition.

Similarly, the Commission's proposal to require independent cost estimates during the voluntary negotiation

phase runs counter to the voluntary nature of this process. If incumbents are required to obtain such estimates, it should be during involuntary negotiations and at the PCS relocators' expense.

The Commission's proposal that all microwave incumbents remaining in the 2 GHz band become secondary on and after April 4, 2005 would provide a disincentive for PCS licensees in subsequent years to pay to relocate microwave incumbents. In addition, primary status for modifications to incumbent systems should be granted in all instances where the change does not increase the relocation costs to the PCS licensees.

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The American Petroleum Institute ("API"), by its attorneys, pursuant to Section 1.405 of the Rules and Regulations of the Federal Communications Commission ("Commission"), respectfully submits these Comments in response to the Notice of Proposed Rule Making ("Notice") adopted by the Commission on October 12, 1995^{1/} concerning the Petition for Rule Making filed by Pacific Bell Mobile Services ("PacBell").

I. PRELIMINARY STATEMENT

1. API is a national trade association representing approximately 350 companies involved in all phases of the petroleum and natural gas industries, including exploration,

^{1/} 60 Fed. Reg. 55529 (November 1, 1995).

production, refining, marketing, and transportation of petroleum, petroleum products and natural gas. Among its many activities, API acts on behalf of its members as spokesperson before federal and state regulatory agencies. The API Telecommunications Committee is one of the standing committees of the organization's Information Systems Committee. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the oil and gas industries.

2. API's Telecommunications Committee is supported and sustained by licensees that are authorized by the Commission to operate, among other telecommunications facilities, point-to-point microwave systems in the Private Operational-Fixed Microwave Service ("POFS") on assignments from the frequency band 1850-1990 MHz ("2 GHz"). These telecommunications facilities are used to support the search for and production of oil and natural gas. Such 2 GHz systems are also utilized to ensure the safe pipeline transmission of natural gas, crude oil and refined petroleum products, and for the processing and refining of these energy sources, as well as for their ultimate delivery to industrial, commercial, and residential customers. The facilities licensed to API's members are therefore essential to the provision of our nation's energy sources.

3. API members utilize their POFS systems to serve a variety of vital point-to-point and point-to-multipoint telecommunications requirements, including communications between oil and gas exploration and production sites, for supervisory control and data acquisition (SCADA) systems, to communicate with refineries, and communicate remotely with pipeline pump and compressor stations. The oil and gas industries were among the pioneers in the development of private microwave, utilizing their systems to remotely monitor and operate petroleum and natural gas pipelines. Accordingly, the API Telecommunications Committee participated in the Commission's earliest rule making proceeding that addressed private microwave use of the spectrum;^{2/} and it has continued to be an active participant in every subsequent major proceeding affecting the POFS.

4. Consistent with its active involvement in telecommunications regulatory issues, the API Telecommunications Committee participated in nearly every phase of the Commission's Docket Nos. 90-314 and 92-9 proceedings that led to the reallocation of spectrum in the 2 GHz range for emerging technologies, including Personal

^{2/} In re Allocation of Frequencies in the Bands Above 890 MHz, Report and Order, Docket No. 11866, 27 F.C.C. 359 (1959).

Communication Services ("PCS"), and to the adoption of reaccommodation provisions for those licensees required to vacate their assignments for new spectrum uses. Rule changes adopted in these two reaccommodation proceedings provide certain important rights and establish various requirements for incumbents and PCS licensees.

5. The Commission confirmed that during the voluntary negotiation period, microwave incumbents are not required to meet or to negotiate with PCS licensees. Instead, the negotiations during this initial phase are strictly voluntary. Because the negotiations are voluntary, the Commission stated that a PCS licensee may choose to offer "premium payments or superior facilities as an incentive to the incumbent to relocate quickly." Notice at ¶ 6. As incumbent licensees, API members applaud the Commission's refusal to turn this rule making into a re-examination of the usefulness of marketplace forces and open negotiations during the initial two-year voluntary negotiation period established in the Docket No. 92-9 proceeding.

6. API members own and operate POFS systems authorized to use channel assignments throughout the entire 2 GHz band. Many of these 2 GHz systems extend across more than one state and traverse numerous Major Trading Areas (MTAs) and Basic

Trading Areas (BTAs). To avoid disruption of these vital systems, it is important for these API members to relocate their entire systems, or large portions thereof, simultaneously rather than to relocate separate links in piecemeal fashion.

II. COMMENTS

A. The Cost-Sharing Plan

7. API supports adoption of the Commission's proposal to create "reimbursement rights" so that, once a relocation agreement is reached between the microwave incumbent and the initial PCS licensee, relocation costs can be shared. Notice at ¶ 47. The Commission proposed that a subsequent PCS licensee would be required to reimburse the PCS "relocator" only if (1) the subsequent PCS licensee's system would have caused co-channel interference to the link that was relocated; and (2) at least one end-point of the former link was located within the subsequent PCS licensee's authorized market area (MTA or BTA). Notice at ¶ 55.

8. To determine whether interference would have occurred, the Commission proposed to apply the TIA Bulletin 10-F interference criteria. Notice at ¶ 52. The

Commission proposed to limit the application of Bulletin 10-F standards to the minimum coordination distance equations set forth in Bulletin 10-F, rather than the variable computations of potential interference permitted by Bulletin 10-F. Id. Under this proposal, reimbursement would be required for facilities within the area of a calculated coordination zone surrounding the PCS base station. Id. The Commission proposed to consider only interference that is co-channel to the transmit and receive bandwidth of the incumbent microwave licensee for cost-sharing and reimbursement purposes. Notice at ¶ 53. This proposal would exclude adjacent channel protection for purposes of cost-sharing and reimbursement. Id.

9. API submits that the Commission should include both co-channel and adjacent channel interference in determining cost-sharing relocation reimbursement.^{3/} The Commission should permit reimbursement wherever the subsequent PCS licensee would have interfered with the microwave incumbent if the incumbent were still operational at that frequency. While inclusion of the adjacent channel element may increase the

^{3/} In paragraph 53 of the Notice, the Commission calculates minimum protection standards for microwave interference. API submits that the Commission should base calculations of protection from adjacent channel interference on NSMA Working Group 20 ("WG-20") standards. See, Appendix B, NSMA WG-20 Draft (August 28, 1995).

number of entities involved in the reimbursement process, it would enhance the ability of relocators to recover the costs of systemwide relocations. This, in turn, would promote unrestricted negotiations between the relocater and microwave incumbent.

10. The Commission invited comment on whether it should include in its cost-sharing formula only actual costs, or whether it should include premium costs either on a regular basis or with an accelerated depreciation schedule. The Commission has defined actual costs as the "actual cost of relocating a microwave incumbent to comparable facilities" and premium costs as "payments above the cost of providing comparable facilities." Notice at ¶ 36. API believes that the Commission should not define actual costs so narrowly that its definition limits free and open negotiations during the voluntary phase. Microwave incumbents will be placed at a severe disadvantage if they cannot freely negotiate for the PCS licensee to pay possible additional costs above the cost of what constitutes comparable facilities.

11. For example, if the continued operation of a 2 GHz system parallel with the replacement system is not possible during a transition phase because of limited equipment space, additional costs may be incurred. These could include

temporary equipment shelters and portable antenna towers. Unless these or similar accommodations can be made during a "cut over" phase, it may be necessary to shut down pipelines operated remotely over incumbent systems, or dedicate additional personnel to man valves, and pump and compressor stations in instances where it is necessary to curtail normal business operations. There will be loss of revenues and profits. Consequently, relocation costs under these circumstances could include more than just those incurred for strictly comparable facilities, depending upon the definition of that term.^{4/}

12. A length of 120 months is proposed for the duration of the cost-sharing formula. Thus, if a PCS licensee placed a link in operation after 10 years, it would not be required to reimburse the relocater. The Commission has tentatively concluded that the 10-year period would expire for all PCS licensees on April 4, 2005, which is 10 years after the commencement of the Blocks A and B voluntary negotiations. Notice at ¶ 39. The 10-year period should commence to run

^{4/} The Commission mandated that "PCS licensees must provide incumbents with a seamless transition from the old facilities to the replacement facilities." Notice at ¶ 76 [citing ET Second Memorandum Opinion and Order, 9 FCC Rcd 7797 at ¶ 29-31]. Other actual costs could include hot standby equipment; new buildings; supervisory staff costs; permit costs; engineering costs; administrative costs; business disruption costs to incumbents, etc.

when the PCS licensee makes the initial payment to the incumbent, rather than 10 years from the start of negotiations. The Commission's proposal to set the time frame from the start of the Blocks A and B negotiation period unfairly penalizes those entities involved in subsequent negotiations by shortening the period during which they may secure reimbursement.

13. The Commission has proposed to facilitate system-wide relocation of 2 GHz microwave incumbents by enabling a PCS licensee that relocates a non-interfering link which is not in its licensed frequency band or its service area to recover full reimbursement for relocation costs, up to the amount of a Commission-proposed "relocation cap." Notice at ¶ 32. The Commission also proposed *pro rata* reimbursement where one end-point of a link lies inside the relocator's service area or both end-points of a link lie inside the relocator's service area but the link is not entirely within the relocator's frequency block. Notice at ¶ 34. API generally endorses this proposal, since it would encourage a relocator to facilitate replacement of an incumbent's entire system or major portions thereof rather than force the incumbent to accept piecemeal relocations. API believes that the Commission should permit a PCS licensee to receive 100% reimbursement (up to the cap) for relocating a link that

is inside of its market area and outside of its frequency block, as long as the relocators' own facilities would not have caused adjacent-channel interference. See, Notice at ¶ 34. Similarly, it is submitted that when the entire link resides in a single MTA, but its close proximity to an adjacent MTA impacts a PCS licensee in the adjacent MTA, the adjacent MTA licensee should also participate in the reimbursement.

14. The Commission has also proposed to establish a limit or cap on the amount of a payment that would be subject to reimbursement. The amount which the subsequent PCS licensee would be required to pay the relocators PCS licensee pursuant to the cost-sharing formula would be set at \$250,000 per link, with an additional \$150,000 per link if a tower needs to be constructed. API believes that an inadequate reimbursement limit will inhibit open negotiations between the PCS relocators and the microwave incumbents. For example, in many instances a ceiling of \$250,000 (plus the \$150,000 for a new tower) could constrain the ability of a PCS relocators to negotiate freely with the knowledge that it will be permitted to recoup an appropriate portion of a reasonable payment for relocation. API believes that the reimbursement cap should be set at \$600,000 per link as originally proposed by PacBell.

15. Another Commission proposal is to allow PCS-designated entities (small businesses) that are entitled to make auction payments in installments to make cost-sharing reimbursement payments in installments as well. The Commission plan would also permit UTAM to make payments in installments. API asks the Commission to clarify this proposal to provide that UTAM must pay microwave incumbents immediately or as stipulated in its agreement with the incumbent, and that only the cost-sharing reimbursement may be remitted on an installment basis.

16. The Commission's cost-sharing plan also envisions a clearinghouse to register and track the establishment and payment of reimbursement rights. Notice at ¶ 63. Cost-sharing disputes would be brought to the clearinghouse for resolution, and then to mediation or arbitration. API agrees in theory with the notion of a clearinghouse, but urges the Commission to require that the clearinghouse be administered by a neutral third party.

B. Reaccommodation Refinements

17. The Commission also proposed in the Notice to modify the rules concerning the one-year involuntary negotiation period. Inasmuch as the rules require incumbents and PCS

licensees to negotiate in "good faith" during the involuntary negotiation period, the Commission proposed to define "good faith" for the purpose of this process. It has proposed that, when the PCS licensee has offered comparable facilities to the microwave incumbent, that act constitutes a good faith offer. An incumbent's rejection of such an offer would create a rebuttable presumption that the incumbent is not acting in good faith. Since a clear definition of "comparable facilities" is paramount to the success of the proposed "good faith" definition, it is essential that it also be clearly defined. Notice at ¶ 69. The Commission has offered that such a definition be based on the following three factors: (1) communications throughput; (2) system reliability; and (3) operating cost. Notice at ¶ 74.

18. The Commission has proposed that comparability mean replacement with reliability and throughput which is "equal to or greater than that of the system to be replaced", and operating costs that are "equal to or less than those of the existing system." Notice at ¶ 73. API supports the Commission's plan to place a floor rather than a ceiling on acceptable standards for comparable facilities. API, however, opposes the Commission's proposal to permit "trading-off" system parameters. Notice at ¶ 75. For example, API urges the Commission to ensure that reliability means equivalency in

all aspects of reliability, including propagation reliability and equipment reliability. Moreover, a PCS relocater should not be able to cut corners on one aspect of comparability, such as reliability, and make up for it in another aspect, such as operating costs or throughput.

19. The communications throughput component of this proposed definition must be clarified to encompass the capacity of the incumbent system, not the level of actual use at some point. Otherwise, a microwave incumbent could be forced to accept a lower capacity system than if the definition is based on the capability of the incumbent's existing facilities.

20. The Commission has defined operating costs as the costs to operate and maintain the microwave system. API agrees with this definition because it recognizes that operating costs of replacement facilities should not be greater than existing facilities. API requests the Commission to clarify, however, that its definition of operating costs includes the total costs to operate and maintain the microwave system. The operating costs of new analog equipment may be significantly greater than the operating costs of existing equipment (and greater than new digital equipment) because analog equipment is no longer state of the art. Instead,

analog equipment is being phased out of production by some manufacturers and will become increasingly unavailable and/or more expensive to obtain, operate and repair. The increasing lack of spare parts, replacement units, and service personnel will render the operating costs of new analog equipment greater than the operating costs of existing systems, regardless of whether existing systems are analog or digital.

21. A fourth element should be included in the definition of comparable facilities. The proposed replacement system must also have like "serviceability." When the proposed system malfunctions, access to those elements essential to restoration of service must be equal to or greater than that applicable to the incumbent system.

22. The Commission has proposed to narrow the availability of comparable facilities under involuntary relocation to the cost of relocating only those specific microwave links in the incumbent's system that must be moved to prevent harmful interference by the PCS licensee's system. Notice at ¶ 76. API urges the Commission to recognize that, in some instances, like a rock thrown into a pond, relocation of one link in a system may have a ripple effect upon the remainder of the system. In those instances where relocation

of one link degrades the overall system, the PCS licensee must be required to pay the cost of furnishing systematic comparability, so that the microwave incumbent is made whole following the transition.

23. The Commission also proposed to exclude from the calculation of comparable facilities "extraneous expenses". API submits that such a definition is far too narrow. All costs and fees associated with the relocation process will be incurred by microwave incumbents because of the FCC's reallocation of the 2 GHz band to accommodate emerging technologies. These costs are not incurred by the incumbent's free will. Should microwave incumbents incur any reasonable expense in the course of complying with this forced relocation, it is only fair that the relocating parties pay that expense. These expenses may include those discussed in Paragraph 11 or similar legitimate costs.

24. Additionally, the Commission invited comment on whether the PCS licensee and microwave incumbent should be *required* to obtain independent cost estimates during negotiations. API submits that mandatory independent cost estimates would be entirely improper during the voluntary negotiation phase. The Commission's own Notice stated that:

During the initial voluntary phase, emerging technology providers and microwave licensees may negotiate any mutually acceptable relocation agreement. Our rules do not require microwave incumbents to meet or negotiate with emerging technology licensees during this period; rather, negotiations are strictly voluntary and are not defined by any parameters.

Notice at ¶ 6. Requiring an entity to obtain a cost estimate during the voluntary negotiation phase runs directly counter to the voluntary aspect of this period. Furthermore, since incumbents are free to refuse to negotiate during this period, requiring cost estimates is an anachronism. Should the Commission decide to mandate independent cost estimates, this requirement should only apply to the involuntary negotiation phase. Moreover, any fee for obtaining such cost estimates should be reimbursable by the PCS licensee; but for the PCS licensee, the microwave incumbent would not incur such a cost.

25. Depreciation of equipment should not be a factor in determining costs; PCS licensees should be required to compensate the incumbent for the cost of replacing its existing system, not merely for the depreciated value of that equipment. API urges the Commission to recognize that depreciated value would not permit the replacement of comparable facilities without imposing costs on microwave incumbents.

26. The Commission requested comment on how to account for technological disparities between old and new microwave equipment, such as analog and digital equipment. API urges the Commission to recognize that, today, digital equipment is the standard for microwave systems. Many manufacturers have terminated production of analog equipment; such "manufactured/discontinued" equipment would be unacceptable as replacement equipment because it would not meet the Commission's reliability maintenance standards. Furthermore, the Commission's statement that the equipment "cost obligation of the PCS licensee would be the minimum cost the incumbent would incur if it sought to replace but not upgrade its system" ignores the fact that, for purchasers in 1995, digital equipment is not an upgrade, it is the standard. The Commission should not penalize microwave incumbents simply because technology has advanced to a new level. Many microwave incumbents replacing their system today would choose digital equipment because digital equipment, rather than being an "upgrade", is simply the "plain vanilla" industry standard of the late 1990s. Particularly in terms of equipment manufacturers' future commitment to manufacture replacement equipment, produce spare parts, and provide customer service, digital equipment is the only viable choice for many replacement systems.

27. API supports the Commission's proposal that the 12-month trial period should not commence until the date on which the relocated licensee commences operation on the new system. Notice at ¶ 87. Additionally, API agrees with the Commission that the microwave incumbent be allowed to surrender its 2 GHz license before the end of that 12-month period without surrendering any rights to satisfaction with its new facilities or relocation to its previous channel assignments and equipment should the trial facility fall short of the comparable test.

28. The Notice clarifies that primary status will be granted to microwave incumbents in the 2 GHz band only for minor modifications that do not increase the costs to PCS licensees. API submits that where no additional cost is added to PCS licensee's costs, any modification should be permitted -- including station relocations of greater than two seconds, or even frequency changes that might be dictated by relocation. To confine the status to minor modifications is excessively restrictive if the ultimate measure is whether the change increases the relocation costs to PCS licensees.

29. The Commission has announced plans to impose a time limit on a PCS licensee's obligation to provide comparable facilities; all microwave incumbents remaining in the 2 GHz

band would become secondary on and after April 4, 2005. API adamantly opposes adoption of this proposed cut off. Not only will its adoption serve as a disincentive for PCS licensees to relocate microwave incumbents in subsequent years, it totally ignores the legitimate life of microwave equipment now being operated in rural areas that may ultimately be forced from service with no compensation. The mere fact that some systems are operated in rural areas where PCS buildout may not occur until after 2005 should not disqualify them from the economic protections available to urban systems. Such a result could constitute an unlawful taking of property without just compensation. In light of the Commission's decision to adhere to its existing rules for voluntary negotiations that enable microwave incumbents to bargain for the best possible result during the voluntary negotiation period, forcing the incumbents into secondary status prematurely directly conflicts with the purpose of the Commission's overriding policy and existing rules.

30. Finally, the Commission solicited comment on whether to clarify or modify "certain other aspects of the microwave relocation rules adopted in our *Emerging Technologies* docket, ET Docket No. 92-9". Notice at ¶ 91. API strongly opposes any further modification of the established rules. As the Commission itself stated in this same Notice: